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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,321	12/04/2003	Tom Hopkins	HOP-1	7325
29698	7590	09/28/2007	EXAMINER	
LEIGH P. GREGORY			FERGUSON, LAWRENCE D	
PO BOX 168			ART UNIT	
CLEMSON, SC 29633-0168			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/728,321	Applicant(s) HOPKINS, TOM	
	Examiner Lawrence D. Ferguson	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed June 27, 2007.

Examiner regrets the untimely reopening of the case and withdraws the previous rejections to further prosecute the claimed invention. Claims 1-28 are pending with claims 22-28 withdrawn as non-elected invention.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Obvious Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 and 14-19 of U.S. Patent No.

7,268,098. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both include a multilayer oriented thermoplastic composite for use as a register or receipt tape, where U.S. Patent No. 7,268,098 can comprise a core layer, where the monolayer film is equivalent to the core layer, in addition to an anti-static coating (first outer layer) and a heat sensitive thermal image coating.

Claim Rejections – 35 USC § 103(a)

5. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al (U.S. 4,996,182).

Matsui discloses a multilayer oriented thermoplastic composite for use in printing devices (column 1, line 66 through column 2, line 36) comprising a resin film, a core layer and a heat sensitive recording layer, where an anti static agent can be coated on the resin film (column 3, lines 48-50 and column 4, lines 18-20). Matsui further discloses pigments can be added to the resin film (column 3, lines 43-48) as in claims 1 and 12. The substrate has a thickness of $30\mu\text{m}$ and the heat sensitive layer has thickness as low as 2 g/m^2 (column 4, lines 5-10 and column 6, lines 50-53). Matsui discloses the film layer comprises a cavity content (column 9, lines 20-28) as in claim 6 and the film

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comprises polyethylene (column 3, lines 9-17) as in claims 8 and 18. The composition can be biaxially oriented or oriented in the machine direction (column 2, lines 22-36 and column 9, lines 20-27) as in claims 9-10 and 19-20. Because Matsui discloses a multilayer oriented thermoplastic composite with equivalent layers as the claimed invention, it would have been expected for the composite to have a secant modulus as in instant claims 1, 7, 12 and 17, absent any evidence to the contrary.

Although Matsui does not specifically disclose the composite has a thickness of from about 0.05 mils to about 0.75 mils, thickness is an optimizable feature. Applicant fails to disclose any criticality with respect to the recited "thickness of from about 0.05 mils to about 0.75 mils." Therefore, in the absence of any evidence to the contrary, it would have been obvious to one of ordinary skill in the art to optimize the composite because discovering the optimum or workable range involves only routine skill in the art. The thickness directly affects the flexibility of the paper material. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 USPQ 215. In the absence of evidence of criticality for the thickness by Applicant, it is obvious to optimize the composite. Additionally, there is also no clear teaching away from the claimed thickness of the composite material by Matsui, as the reference does not exclude any thicknesses for the composite material.

Response to Arguments

6. Applicant's argument regarding the rejection made under 35 U.S.C. 103(a) as being unpatentable Ewing (U.S. 6,407,034) in view of Ewing (U.S. 6,284,177) further in view of Limbach (U.S. 3,004,284) are moot based on grounds of new rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L. Ferguson
Patent Examiner
AU 1774


MILTON I. CANO
SUPERVISORY PATENT EXAMINER